

Vascular Plants of Williamson County

Sisymbrium irio – LONDON ROCKET, ROCKET MUSTARD [Brassicaceae]

Sisymbrium irio L., LONDON ROCKET, ROCKET MUSTARD. Annual, taprooted, rosetted (except on depauperate individuals), 1–several-stemmed at base, branching from canopy downward in age, erect to ascending, 12–95 cm tall; shoots with basal leaves and cauline leaves, nearly glabrous, hairs unbranched, appressed downward, and mostly observed along ridges and on margins. **Stems:** cylindric, to 9 mm diameter, smooth but becoming weakly striped upon drying, green aging dark red or purplish. **Leaves:** helically alternate, pinnately lobed with 3–5(–6) lobes per edge to unlobed on smaller or upper cauline leaves, petiolate, without stipules; petiole channeled, 10–90 mm long, narrowly winged on upper side, sparsely hairy on wing margins; blade of lower cauline and basal leaves oblong to oblanceolate, to 150 × 100 mm, deeply lobed with rounded sinuses, hairy at bases of sinuses, the terminal lobe 1/4–1/2 blade length, weakly dentate, the lateral lobes opposite or alternate, spreading to pointed slightly toward leaf base, lanceolate to narrowly ovate, typically toothed on leading margin and entire on trailing margin, obtuse to acute or rounded at tip, pinnately veined with midrib whitish to pinkish and slightly raised on upper surface and principal veins raised on lower surface; blade of cauline leaves shorter and with lobes 0–5 per edge, lanceolate to rhombic, trowel-shaped (trullate), or triangular, irregularly dentate or entire on margins. **Inflorescence:** raceme, terminal, fully expanded sometimes > 330 mm long, 20–110-flowered, the bud and flower-bearing tip < 12 mm long, ± flat topped with open flowers overtopping buds and with ascending, immature fruits surpassing flowers to 20 mm, lacking bracts; peduncle ridged, 15–27 mm long; pedicel 4–6 mm long at anthesis increasing 2× in fruit, sparsely pubescent on upper side. **Flower:** bisexual, radial, 3–4 mm across, nectar-producing on dark green receptacle at base of stamens but lacking well-defined nectaries; **sepals** 4, erect, narrowly elliptic, 2.5–3 × 0.5–1.2 mm, green with membranous margins, glabrous, cupped but not pouchlike at base, outer 2 sepals narrower than inner 2 sepals, blunt-hooded at tip but not distinctly horned; **petals** 4, clawed, oblanceolate-spatulate, 2.5–3.5 × 0.5–0.8 mm, slightly > sepals, light to bright yellow (white); claw = limb, limb elliptic and pinnately veined; **stamens** 6, free, ± equal, 1.6–2.6 mm long; filaments pale yellow and greenish aging more yellow, swollen at base; anthers basifixed, dithecal, 0.8–0.9 mm long, light yellow, arrow-shaped at base, longitudinally dehiscent; pollen pale yellow; **pistil** 1, at anthesis 2.5–3.5 mm long, with stigma exerted; ovary superior, straight and ± square in ×-section, greenish, glabrous, 2-chambered, each chamber with many ovules; style 0–0.4 mm long; stigma capitate, 2-lobed, lobes opposite anthers of longer stamens. **Fruit:** siliqua (silique), dehiscent by 2 valves parallel to septum, many-seeded, 35–50 mm × 1 mm, ± hexagonal in ×-section with faces ⊥ to septum wider than others, with 35–50-seeds per chamber in 1 row; valves slightly bulging by seeds, 3-veined or veins obscure; beak 0–0.4 mm long. **Seed:** ellipsoid to oblong, 0.9–1 × 0.5 mm, ± glossy cinnamon-brown to almond-brown, showing outline of radicle.

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